

## **Rockville Senior Center Expansion and Site Improvements**

### **Overview**

As the prime contractor on Rockville Contract #08-08(A), Shaffer, Wilson, Sarver, and Gray, P.C. (SWSG) is providing architecture, building engineering, and construction management services to the City of Rockville to complete the Rockville Senior Center Expansion and Site Improvements project. SWSG is working with two sub-consultants to provide additional services to complete the project. Sabra, Wang, and Associates, Inc. (SWA) is acting as a sub-consultant to SWSG to provide traffic engineering services for the project. Charles P. Johnson & Associates, Inc. (CPJ) is acting as a sub-consultant to SWSG to provide site and environmental planning, site engineering, and surveying services for the project.

The Rockville Senior Center project consists of adding a 6,070 SF addition to the west side of the existing building. The space will be used primarily to increase the size of the fitness center but also includes additional storage and office space. The project also includes provision of 31 additional parking spots through a parking lot addition. The primary goals of the project are to provide much needed additional space for the users of the senior center as well as additional parking while maintaining the park-like environment that currently exists on the site.

The preliminary application and site planning process is Phase II of four phases in this project. Phase I was feasibility study phase that gathered a large amount of input from the users of the Senior Center, the City of Rockville, and the surrounding community and used it to develop basic concepts for the building addition and site improvements. Phase III will be the final design and construction document development phase and Phase IV will be the actual construction phase.

### **Existing Site Conditions**

The Rockville Senior Center site currently sits on the east portion of the property adjacent to the Woodley Gardens neighborhood with tree stands and pedestrian paths as well as some open lawn area occupying the west half of the property adjacent to the Interstate 270 Right-of-Way. The sole entrance to the property comes from Carnation Drive which terminates in the form of a circular bus loop returning to Carnation Drive. The bus loop allows direct access to the south side of the Senior Center building. From the entrance, two parking lots can be accessed, one smaller parking lot allows for access to the east side of the building. The second parking lot is accessed from a road leading from the bus loop and running along the west side of the building to the parking lot. There are 109 total existing parking spaces including 19 handicap accessible spaces. In addition, there are several unmarked parking spots that are used by staff and by senior center patrons during occasional major events. According to current parking requirements, this means that current parking lot provides 59 parking spaces less than required.



Figure 1. View of Rockville Senior Center and Carnation Drive bus loop.

The Rockville Senior Center building is formerly Woodley Gardens Elementary school and is an irregularly shaped building approximately 294 feet long and 124 feet wide. Adjacent to the building is a fenced community garden on the north side and playground equipment on the west side. Pedestrian paths exist throughout the site allowing pedestrian access from parking lots and offsite to the building and its amenities. This includes a pedestrian path allowing access to the Rockville Senior Center from Gude Drive at its intersection with Piccard Drive running along the north side of the site.

Trees are plentiful throughout the site. Trees of approximately 6" to 36" DBH lie on the east side of the site and are in more plentiful stands on the west of the side where there is less development. A previously approved Natural Resources Inventory (NRI) indicates that there are no wetlands on-site and no streams exist on site. The soils on site are classified as Glenelg Silt Loam (2B) according to the approved NRI approved by the City of Rockville 6/27/2007 (FTPO# 2007-0011).



Figure 2. Mature tree canopy near the existing basketball court.

Existing drainage amenities on the site consist of storm drain and a bioretention facility. The extreme southern portion of the site near the bus loop drains to storm drain inlets, one located at the low point of the small parking lot and a second located off-site on Carnation Drive. The remainder of the site drains via swales and small culverts under pedestrian paths to a 36" road culvert that runs offsite on the west side of the site under I-270. The inlet of the 36" road culvert is located at the low point of the site on the extreme western edge. The existing bioretention facility is adjacent to the existing northern parking lot (the large parking lot) and treats runoff from that surface before discharging to the 36" road culvert.

The results of the due diligence effort on the part of CPJ to obtain plans for all existing utilities on the site showed that the site has several different utility lines running through it. A 12" water line runs along the northeast corner of the site from Gude Drive before leaving the site to connect to the Aster Boulevard water line. There is also an 8" sewer line that runs from the southeast corner of the site (Carnation Drive) through the roadway entrance to the site and terminates at the senior site building. Overhead power lines also run from the southeast corner of the site and terminate at the building. Finally, a 42" gas main runs along the northernmost portion of the site parallel to Gude Drive and a distributor line runs along the east boundary of the site to feed the senior center building and a portion of the Woodley Gardens neighborhood. The 42" gas main lies in a 75' wide exclusive use easement parallel to Gude Drive owned by Williams Gas Pipeline – Transco.

Per the City of Rockville zoning plan adopted 12/15/2008, the site is zoned as Park. All three of the properties comprising the site are owned by the Mayor and Council of Rockville (the City of Rockville).

## **Work Completed to Date**

In Phase I of the project, SWSG and its consultants completed a feasibility study for the project. SWSG and the City of Rockville formed a steering committee consisting of the City, the consultants, and the staff, users, and neighbors of the Rockville Senior Center to guide the development of the building addition and site improvement concepts. The steering committee met four times over the course of four months. The committee developed a survey which was distributed to users as well as neighbors of the Senior Center. The committee also coordinated the use of focus groups on four different occasions to further determine what needs and desires for the Senior Center should be focused on. Finally, two public meetings were held to present the final design concepts.

SWA completed a traffic study of all intersections surrounding the Senior Center to determine the existing traffic conditions and assess what impacts an addition to the facility would have on traffic in the area. The study showed that existing traffic conditions have already deteriorated to poor levels of service but the additional trips generated by a building addition would not appreciably impact the level of service for roads and intersections surrounding the Senior Center.

CPJ completed a request for information from the City of Rockville and local utilities for plans of all existing utilities, storm drain, street grades, and existing stormwater management and environmental plans. The documents obtained were coupled with a thorough field survey which located all visible and MISSUtility-marked utilities, all buildings, trees with a breast-height trunk diameter (DBH) greater than or equal to six inches within the limits of work, all paving and sidewalks, and field topography. The boundaries of the property were also delineated based on existing deeds and plats although this delineation does not constitute a complete boundary survey. The documents collected were coupled with the field survey information to create a site base drawing to be used as a basis for proposed work at the site.

At the conclusion of Phase I, SWSG developed a conceptual layout of the Rockville Senior Center addition as well as several elevation drawings to give a graphical representation of what the building addition might look like based on the information gathered during Phase I and discussions with the steering committee. CPJ completed two conceptual site plan options for consideration by the steering committee based on the layouts developed by SWSG and all of the information gathered during Phase I. Finally, SWA completed the traffic study for the area and submitted it to the City of Rockville February 2009.

The results of Phase I were compiled into a Feasibility Study report developed by SWSG with input from CPJ and SWA. based on the work done in Phase I. The report was submitted to the steering committee in February 2009.

## **Existing Site Deficiencies**

The primary need on the site is for more building space to house senior center activities. This was the primary reason for the project and is a key reason for the master plan. The City of

Rockville identified a need for expansion of the existing building space in order to expand the senior center's fitness facilities.

A secondary deficiency on the site is the parking and traffic flow. Currently, all traffic flows access the site via the Carnation Drive entrance. During normal operation of the senior center, this is not a problem. However, for major events that the senior center hosts from time to time, the single access point can create congestion problems at the entrance. Furthermore, the current entrance location causes patrons of the senior center to navigate through small streets and neighborhoods rather than accessing the site from a major thoroughfare such as Gude Drive. The same issue applies from a parking perspective. The existing parking facilities provide adequate parking for the users of the senior center during normal operation. However, during occasional large events, the parking becomes inadequate.

### **Proposed Site Improvements**

In order to address the deficiencies at the Rockville Senior Center site, SWSG and CPJ propose several site improvements. These improvements will address the needs identified by the steering committee.

The primary improvement is to expand the Rockville Senior Center on the west side of the building by 6,070 SF. The expansion will accommodate additional fitness facilities for the senior center. The building expansion will be complemented by several other improvements on the site.

The existing northern parking lot will be expanded on the east end and re-stripped to hold 104 cars including 10 handicap-accessible spaces. Seven parallel parking spaces will be striped along the southern side of the one-way circular drive south of the building. Ultimately, the Rockville Senior Center site parking facilities will be expanded to provide 140 spaces with a potential for 201 spaces. Sixty-four deferred parking spaces would be located in three areas: 18 spaces in the grassy area off the southwest corner of the building, nine spaces on the opposite side of the driveway from the 18 space lot, and 37 spaces located north of the northern parking lot.

While the final location has not yet been determined, the existing playground equipment impacted by the building addition will be moved to another location on the site. The foot paths that wind through the area adjacent to the location of the proposed building addition will be either removed or re-routed as necessary.

In keeping with the desire of the steering committee and the community to maintain the park-like setting of the site, reforestation, afforestation and landscaping areas will be included in the construction of the site. These areas will beautify the site and maintain its park-like setting. While tree impacts and removals are not desired, they will occur due to the proximity of several trees to the building addition and parking lot expansion locations. The proposed improvements will result in the removal of approximately 13 trees ranging in type and size from small ornamentals and street trees with trunk diameters of 6" to larger older significant trees with trunk diameters of 30". In addition, impacts will be made to other trees and these impacts will be

mitigated as required under forest conservation laws of the City of Rockville and the State of Maryland. Modifications to the site and the building were laid out and sized to impact the fewest trees possible and every effort will be made to protect and preserve as many trees as possible.

Stormwater Management (SWM) for the improvements to the site will be provided on-site. The site is being treated as redevelopment per the guidelines of the Maryland Department of the Environment's SWM Manual and the stormwater management design accordingly. The SWM practices and facilities for the site are also designed to meet new Environmental Site Design guidelines set forth in the SWM Manual.

In order to effectively manage stormwater, SWSG and CPJ are proposing measures to treat stormwater quality and quantity volumes at their sources. The parking lot additions will be treated by providing porous paving in 43 parking spaces which includes compensatory treatment for the building addition rooftop which will not be treated. In addition, porous paving is proposed for the pedestrian path replacements.

### **Zoning Regulation Compliance**

As stated in the Site Plan Application, this project should and does comply with the appropriate zoning regulations set forth by the City of Rockville. This project is zoned as Park and thus, the mixed use development standards do not apply. The landscape plan is designed based on the *Landscaping, Screening and Lighting Manual* effective October 27, 2009. The project, because it is a publicly-owned, publicly-operated facility, is eligible for a waiver from APFO requirements. However, the project has been analyzed for adequate facilities for transportation (a CTR has been completed and approved by the Department of Public Works), fire and emergency access (a fire site plan has been submitted and conditionally approved by Inspection Services), and water and sewer service (water and sewer service will be addressed internally within the building to connect to the building addition). Because the project is a park, an analysis of adequate facilities for schools does not apply.

Parking requirements are met per section 25.16 to provide the additional appropriate level of parking (added 30 regular spaces and 1 handicap-accessible space) to maintain the current level of parking deferment based on the size of the building addition. Per Section 25.18, the project is exempt from this article as the only signs to be altered during the project will be traffic control signs under section 25-457 Item a(4). Finally, the project complies with Public Use space guidelines. The Rockville Senior Center site is also used as a park by the Woodley Gardens community and access to the park will not be altered after construction. In addition, the park amenities such as the playground equipment are planned to be improved by the city in the coming years. No additional utilities are planned to be installed but should they be necessitated by reviewer comment, conduit shall be located underground. Proposed landscaping, screening and lighting is designed in accordance with the *Landscaping, Screening and Lighting Manual* effective October 27, 2009. Finally, due to the fact that the building addition is located underneath overhanging trees, the building should adhere to the shadow guidelines outlined in Section 25.17.

A water and sewer plan is not being prepared as neither utility is proposed as part of this project. Connections from the existing building to the proposed addition will be made via internal plumbing. Increases in service level are not anticipated by the architect or building engineer.